

## CHAPTER 88. INSPECT A REPAIR STATION'S QUALITY CONTROL SYSTEM

### SECTION 1. BACKGROUND

#### 1. PROGRAM TRACKING AND REPORTING SUBSYSTEM (PTRS) ACTIVITY CODES.

*A. Maintenance: 3608 (Revised)*

*B. Avionics: 5608 (Revised)*

**3. OBJECTIVE.** This chapter provides guidance for inspecting the quality control system of a repair station to ensure compliance with the procedures in the Repair Station Manual/Quality Control Manual (RSM/QCM).

#### 5. GENERAL.

*A.* The quality control system must be acceptable to the Federal Aviation Administration that it ensures the airworthiness of the articles on which the repair station or any of its contractors perform maintenance, preventive maintenance, or alterations.

*B.* The repair station must maintain an inspection system and describe the procedures in detail in its manual system. Items such as establishing the purchase of aviation articles, how that material is inspected upon receipt, receiving customer's articles, progressing through each inspection step, and ending in final inspection and approval for return to service. This system will include the controlling and documenting of the maintenance from the incoming inspection to final inspection (work order system). The quality control system also includes a description of the qualifying and surveilling requirements of a noncertificated person.

**NOTE:** The phrase "noncertificated person" means a person or facility outside the repair station, and does not include a noncertificated individual working for the repair station.

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## SECTION 2. PROCEDURES

### 1. PREREQUISITES AND COORDINATION REQUIREMENTS.

#### A. Prerequisites:

- Knowledge of the regulatory requirements of 14 CFR parts 43 and 145
- Successful completion of the Airworthiness Inspector Indoctrination course(s) or equivalent
- Previous experience with certification or surveillance of 14 CFR part 145 repair stations

#### B. Coordination. None.

### 3. REFERENCES, FORMS, AND JOB AIDS.

#### A. References (current editions):

- 14 CFR parts 43 and 145
- Advisory Circular (AC) 145-5, Repair Station Internal Evaluation Programs
- AC 145-9, Guide for Developing and Evaluating Repair Station and Quality Control Manuals
- Order 8300.10, Airworthiness Inspector's Handbook, Vol. 2, Ch 164, Evaluate a Part 145 Repair Station and Quality Control Manual or Revision

#### A. Forms:

- FAA Form 8000-36, PTRS Transmittal

#### B. Job Aids. None.

### 5. PROCEDURES.

A. *Planning.* Prior to inspecting, the principal inspector (PI) or aviation safety inspector (ASI) should carefully review the following:

- (1) 14 CFR parts 43, 65, and 145.

(2) RSM/QCM with reference to part 145, § 145.211, requirements.

(3) Operations specifications.

(4) The Safety Performance Analysis System (SPAS) is the organization's primary source of comprehensive, integrated safety information that is used by inspectors, analysts, and managers in developing and adjusting field surveillance, investigation, and other oversight programs. SPAS interfaces with key fielded oversight programs (such as ATOS, SEP, and the NPG), as well as other government and industry sources, collecting raw performance and operational data, analyzing and summarizing the data, and providing critical information in the form of graphs, tables, and reports. These SPAS outputs are then used to (1) identify safety hazard and risk areas; (2) target inspection efforts for repair stations, and to areas of greatest risk; and (3) monitor the effectiveness of targeted oversight actions. SPAS repair station profile and repair station analytical model (RSAM) are available for use. This data provides additional information on performance and risk associated with individual repair station facilities.

(5) Vital Information Subsystem (VIS).

(6) Certificate-holding district office (CHDO) file.

B. *Quality Control Manual.* Verify the QCM contains the requirements in § 145.211(c) as listed below, but not limited to:

(1) A description of the system and procedures for:

(a) Inspecting incoming raw materials for acceptable quality.

(b) Performing preliminary inspection of all articles that are maintained.

(c) Hidden damage inspection of articles that have been involved in an accident.

(d) Proficiency of inspection personnel (ref. vol. 3, ch. 90).

(e) Current technical data for maintaining articles (ref. vol. 3, ch. 87).

(f) Qualifying and surveilling non-certificated persons who perform maintenance, or alterations for the repair station.

(g) Performing final inspection and return to service of maintained articles.

(h) Calibrating measuring and test equipment.

(i) Taking corrective action on deficiencies.

(2) References, where applicable, to the manufacturer's inspection standards for a particular article, including reference to any data specified by that manufacturer.

(3) A sample of the inspection and maintenance forms and instructions for completing such forms or a reference to a separate forms manual.

(4) Procedures for revising the QCM required under this section and notifying the CHDO of the revisions, including how often the CHDO will be notified of revisions.

*C. Inspection System.* Review a sample of the documents used during maintenance (travelers, work orders, inspection sheets, discrepancy sheets, etc.) as well as an inspection of the articles maintained. Confirm the repair station is performing and recording the following inspections in accordance with the RSM/QCM by verifying the following:

*(1) All Inspections:*

(a) The article is identified throughout the maintenance cycle including parts contracted out to noncertificated persons.

(b) When, where, and to what standard the inspection is done?

(c) Who can perform the inspection?

(d) Where, how, and on what form the results of the inspection is recorded?

(e) Disposition of the article after the inspection depending on each possible result.

*(2) Incoming Raw Materials Inspection.*

(a) Raw materials are identified in accordance with the definitions in the RSM/QCM.

(b) The traceability of the material back to the original lot.

(c) The handling of suspected unapproved parts.

(d) Verify shelf life and expiration dates are within limits.

*(3) Performing Preliminary Inspection.* Compliance with Airworthiness Directives (AD) and, if required, service bulletins associated with the AD requirement.

*(4) Hidden Damage Inspection.* Inspection includes a search for any secondary damage that could have resulted from an accident such as fire or heat damage.

*(5) In-Process Inspection.*

(a) Any additional maintenance as described in a manufacturer's maintenance manual is accomplished in accordance with RSM/QCM.

(b) Procedures for changing the steps in a process specification or accomplishing the tasks out of sequence.

*(6) Continuity of Inspection.*

(a) If multiple shifts or consecutive inspectors are used, verify that the procedures for continuing responsibility for maintenance in process are accomplished.

(b) The status book, shift change log, or similar means used to track maintenance in process is used.

(c) Completion of responsibilities is met in the event inspectors are absent.

*(7) Performing Final Inspection.*

(a) The inspector who is signing off the final inspection and/or approval for return to service for the repair station is authorized on the roster of inspection personnel and is appropriately certificated under 14 CFR part 65 and meet the requirements of § 145.155.

**NOTE: When certificated repair stations are outside the United States, it is not a requirement for the inspection personnel to be certificated in accordance with part 65. The requirements of § 145.155 does apply.**

(b) The repair station inspects and then certifies that each article upon which it has performed maintenance, preventive maintenance, or alterations and is airworthy with respect to the work performed.

(c) Additional maintenance in accordance with approved data is accomplished when the final inspection is not satisfactory.

*D. Qualifying and Surveilling a Noncertificated Person.* Verify that the repair station is qualifying and surveilling noncertificated person who perform maintenance, preventive maintenance, or alterations for the repair station. The PI should review the contracts and surveillance records and verify:

(1) The noncertificated person has and uses a quality control system equivalent to that of the repair station for the work performed; and

(2) The repair station remains directly in charge of the work performed by the noncertificated person.

(3) The contract the repair station has with the non-certificated person includes a requirement that the non-certificated person will allow the FAA to inspect and observe the work performed for the repair station.

(4) The repair station periodically performs and records surveillance of the noncertificated person to confirm they to meet the requirements of the above-mentioned qualification.

(5) The repair station tests and/or inspects, and records that the noncertificated person performed the work satisfactorily and that the article was airworthy before approving it for return to service.

*E. Analyze Findings.* Upon completion of the inspection, record all deficiencies; determine the appropriate corrective action(s).

*F. Conduct Debriefing.* Brief the certificate holder on the inspection results. Discuss any deficiencies and possible corrective actions.

## 7. TASK OUTCOMES.

*A. Complete PTRS.*

*B. Complete the Task.* Completion of this task will result in the following:

- Send letter to the operator documenting all deficiencies
- Initiate an Enforcement Investigation Report if necessary

*C. Document Task.* File all supporting paperwork in the certificate holder's office file. Update the VIS as required.

**9. FUTURE ACTIVITIES.** Schedule and conduct follow up inspections as applicable.